

REMARKS

In this Response, Applicant amends claims 1 and 11 to more clearly recite a respective method and system *for modifying processing on at least one control device*. The amendments do not further limit the claims in that modifying processing encompasses modifying memory and processing encompasses executing stored data. Additionally in this Response, Applicant traverses the Examiner's rejections. Further, Applicant adds new claims 19 and 20 to more specifically recite a *method of implementing a software upgrade for a control device*. Applicant respectfully suggests that the amendments and the new claims materially reduce and/or simplify issues in the application and place the application in better form for appeal, should an appeal be necessary. Further, Applicant respectfully suggests that no additional search is required in that the amended and new claims respectively recite more clearly or more specifically features already considered by the Examiner. Accordingly, Applicant respectfully requests that the amendments and new claims be entered and considered.

Applicant's silence with regard to the Examiner's rejections of dependent claims constitutes a recognition by the Applicant that the rejections are moot based on Applicant's Remarks relative to the independent claim from which the dependent claims depend. Applicant reserves the option to further prosecute the same or similar claims in the present or a subsequent application. Upon entry of new claims 19 and 20, claims 1-20 are pending in the present application.

Claim Rejections - 35 U.S.C. § 103(a)

The Examiner rejected claims 1-18 under 35 U.S.C. § 103(a) as being unpatentable over Stevenson et al. (U.S. Patent No. 6,738,388) in view of Soltis et al. (U.S. Patent. No. 6,493,804).

Applicant's independent claim 1 is directed to a method of modifying processing on at least one control device. In general, Applicant's independent claim 1 enables a download operation to be performed robustly. The download is performed by transferring data, as

further described in Applicant's independent claim 1, and then storing the transferred data in an inactive memory area. By transferring during unscheduled communications periods and storing the data to an inactive area of the memory of the control device, any and all operations of the control device, which use active memory areas, are not affected while the transfer and storage occur. The control device microprocessor is directed to execute the stored data during an idle period of the microprocessor, thus achieving the installation of the downloaded data and so modifying the processing of the control device. In this way, it is possible to achieve the remote updating of, for example, control devices in large chemical plants, while allowing those control devices to continue their current operations. As stated in Applicant's Response filed on October 4, 2004 and as further provided in the following Remarks, neither Stevenson et al. nor Soltis et al. teach or suggest such a system.

In particular, addressing the specific arguments of the Examiner, Applicant also contends that the Examiner's cites to Stevenson et al. and Soltis et al. do not teach all of the features of Applicant's independent claim 1. Applicant's independent claim 1 includes transferring data *from a remote host device* to at least one control device during unscheduled communications periods and *without interrupting the operation of the control device*. The Examiner cites to Stevenson et al. (col. 21, lines 51-67 & col. 22, lines 1-29) as teaching or suggesting this step. As stated in Applicant's previous response filed on October 4, 2004, Stevenson et al. disclose, in the cited lines, communications between a controller and an external field device that the controller controls (*see* Fig. 5, elements 48 and 12). The cited lines do not teach or suggest transferring data *from a remote host device* to a control device.

A closer reading of Stevenson et al. shows that Stevenson et al. disclose having field mounted process control devices perform one or more process control functions using function blocks (col. 1, lines 55-61). Stevenson et al. further disclose configuring function blocks within devices by setting the function block mode to "out of service", so as to change values within the function block. (See col. 26, lines 11-20 and Fig. 10.) As the function block is "out of service", the device cannot perform its process control function using the function block and accordingly the operation of the device is interrupted. Accordingly

Stevenson et al. do not teach transferring data for modifying processing of a control device without interrupting operation of the control device. In fact, Stevenson et al. teach that setting the function block mode to out of service is necessary to change values within the function block (col. 26, lines 18-20), thus teaching away from or against Applicant's method of *transferring data without interrupting operation*, as recited in claim 1.

The Examiner also contends that the combination of Stevenson et al. and Soltis et al. teaches *redirecting a control device microprocessor to execute stored data in an inactive memory area during an idle period of the control device microprocessor*, as recited in Applicant's claim 1. Applicant respectfully disagrees. Stevenson et al. disclose the use of a shadow function block to integrate function blocks residing in a controller with those residing in a field device, where data from the field device and commands to the field device are communicated through the shadow function block (col. 3, lines 13-34). Soltis et al. disclose SCSI storage devices having storage blocks of stored data and locks controlling use of the data in the blocks by clients (Abstract).

While it can be argued whether the combination of Stevenson et al and Soltis et al. increases "the manageability of the available capacity of the disk drives and memory devices while in service in various data processing systems", the combination does not teach or suggest *redirecting a microprocessor, during an idle period of the processor, to execute data stored in an inactive memory area to modify the processing of a control device*, as recited in Applicant's claim 1. Based on Applicant's reading of the references, combining the storage block locks of Soltis et al. with the function blocks of Stevenson et al. may serve to control the use of the function blocks, but does not teach or suggest redirecting a microprocessor to execute data stored in an inactive memory area during idle periods of the microprocessor. Further, neither Stevenson et al. nor Soltis et al., alone or in combination, teach transferring data without interrupting operation of the control device.

In summary, neither Stevenson et al. nor Soltis et al., alone or in combination, teach or suggest the method described by Applicant's independent claim 1, or all of the features of the method. Thus, Applicant's independent claim 1 is allowable, and Applicant's dependent

claims 2-10, which depend from independent claim 1, are also allowable at least by dependency.

Applicant's independent claim 11 is a system claim that includes features similar to allowable independent claim 1. Applicant's independent claim 11 is therefore allowable for the reasons provided with respect to Applicant's independent claim 1. Thus, Applicant's claims 12-18, which depend from independent claim 11, are also allowable. New claims 19 and 20 more specifically recite a method of implementing a software upgrade for a control device. Claim 19 includes features similar to allowable independent claim 1 and is therefore allowable for the reasons provided with respect to Applicant's independent claim 1. New claim 20 depends from independent claim 11 and is also allowable at least by reason of dependency.

CONCLUSION

Applicant believes this Response to be fully responsive to the present Office Action. Thus, based on the foregoing Remarks, Applicant respectfully submits that this application is in condition for allowance. Accordingly, Applicant requests allowance of the application.

Applicant invites the Examiner to contact the Applicant's undersigned Attorney if any issues are deemed to remain prior to allowance.

Respectfully submitted,

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